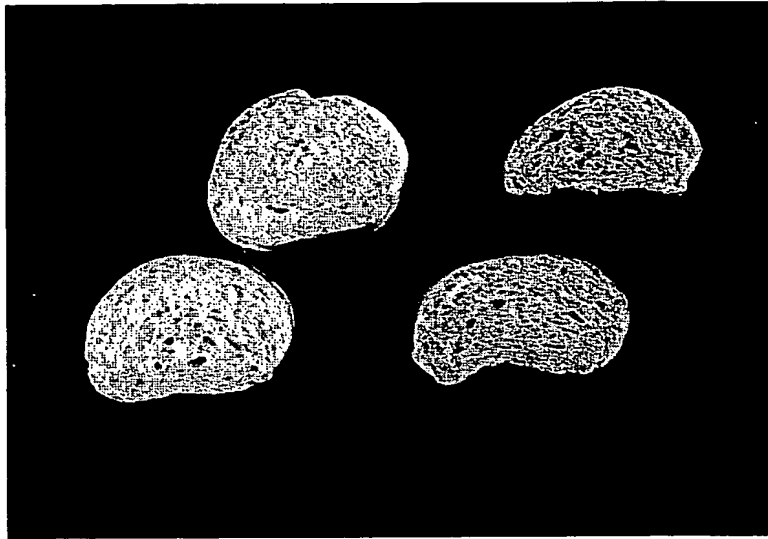


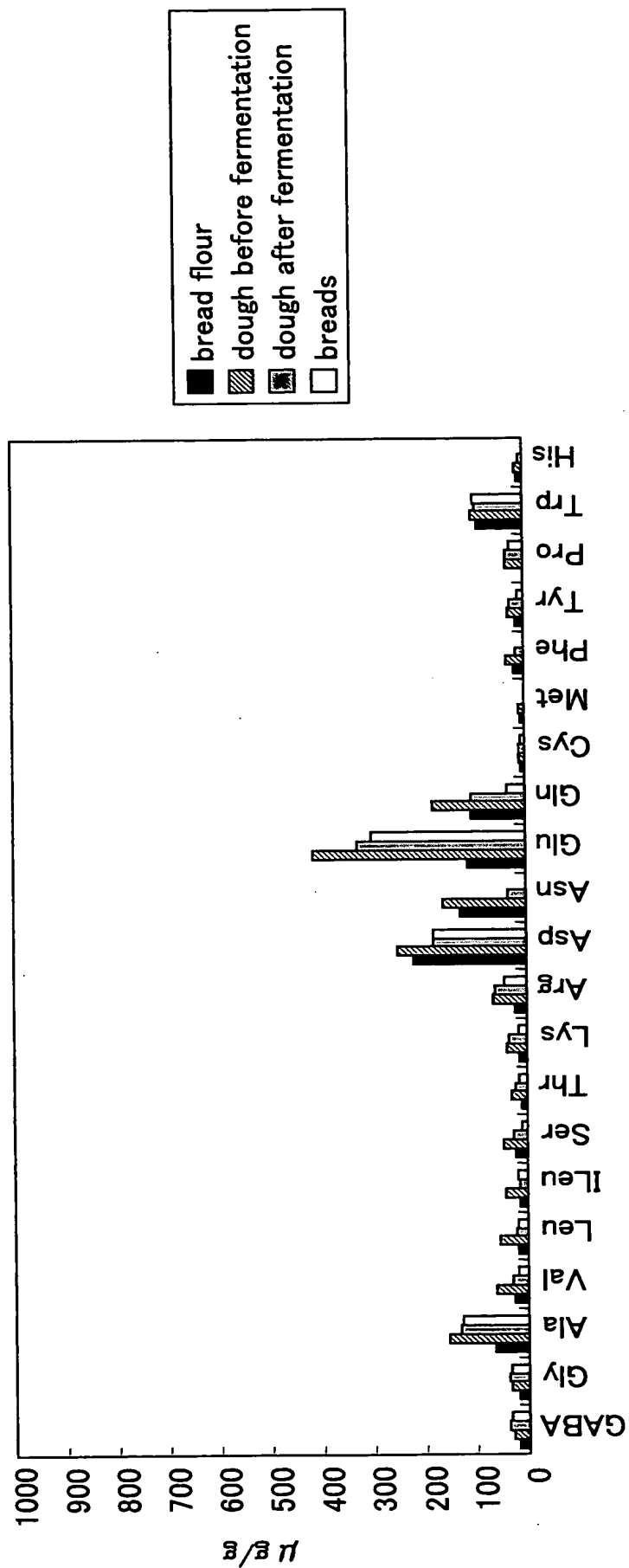
FIG.1



breads manufactured with different mixed ratio of malt flour

FIG.2

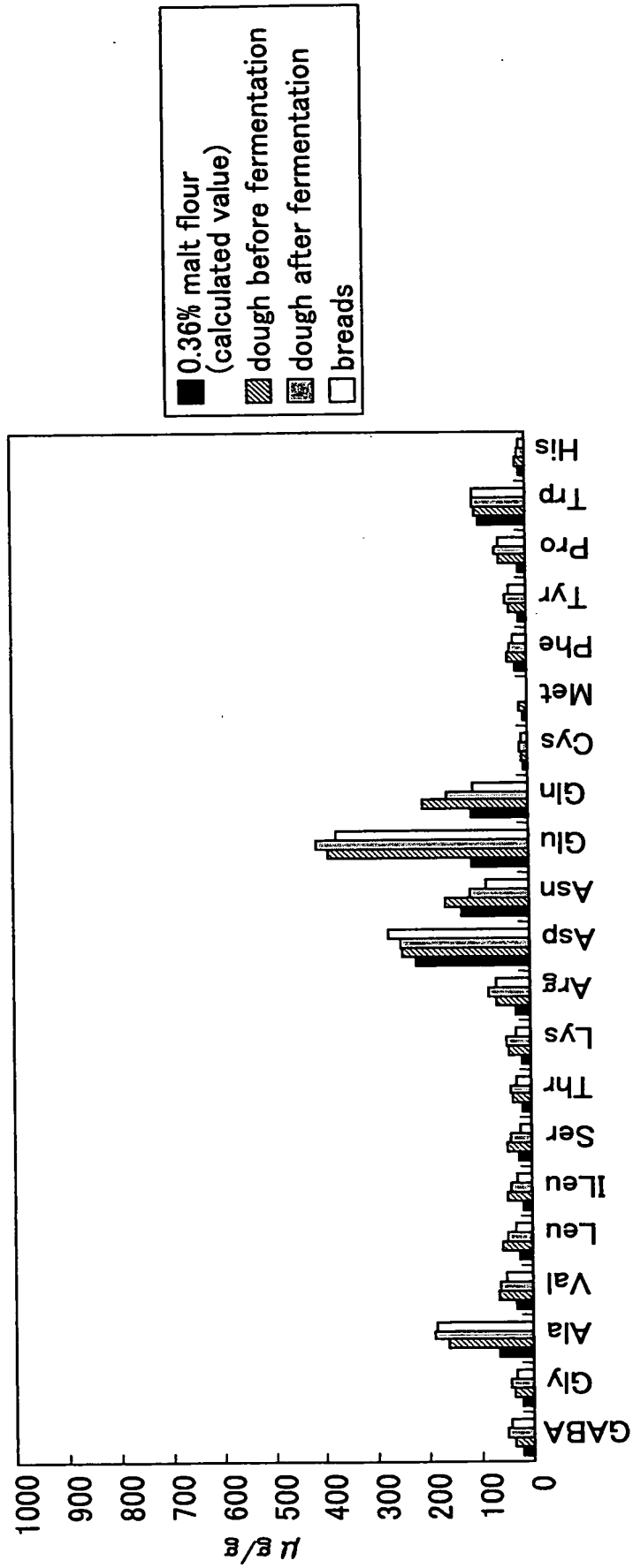
bread flour only



free amino acids contents during the manufacturing process of breads with only bread flour

FIG.3

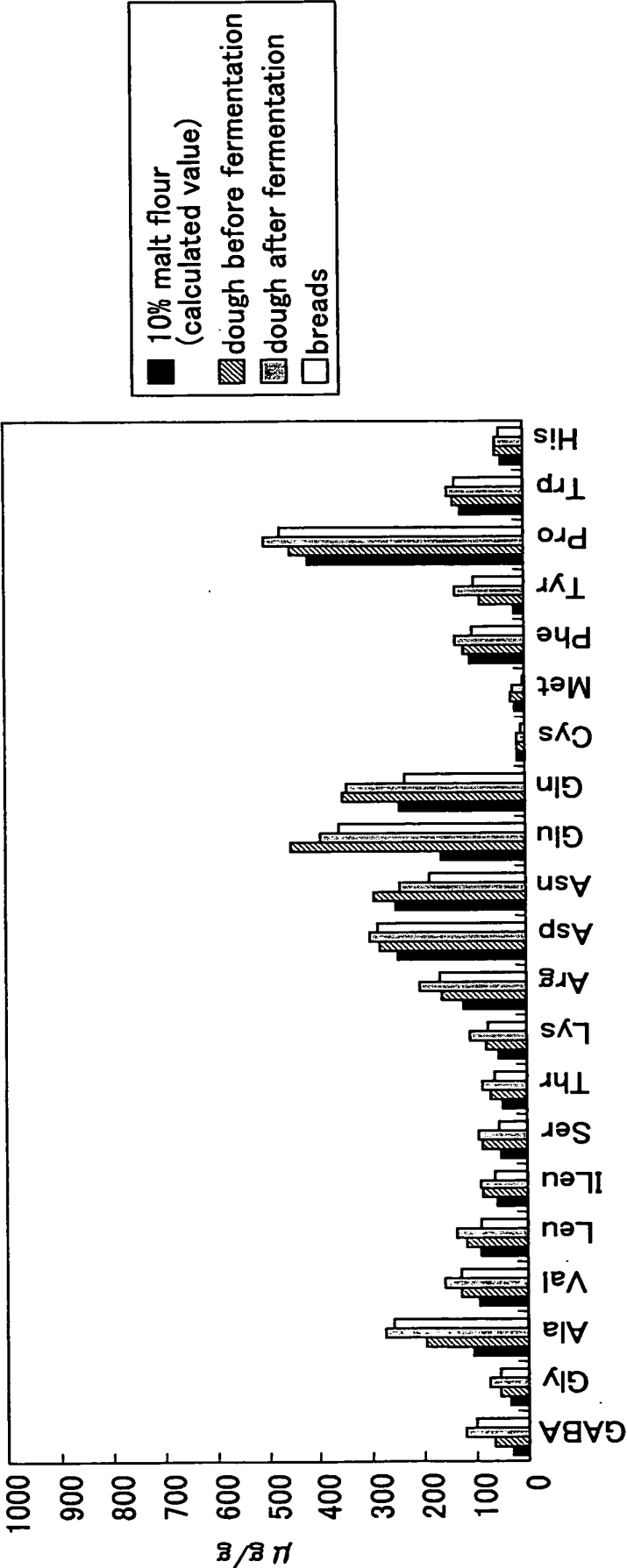
0.36% malt flour



free amino acids contents during the manufacturing process of  
 breads with 0.36% of mixed ratio of malt flour

FIG.4

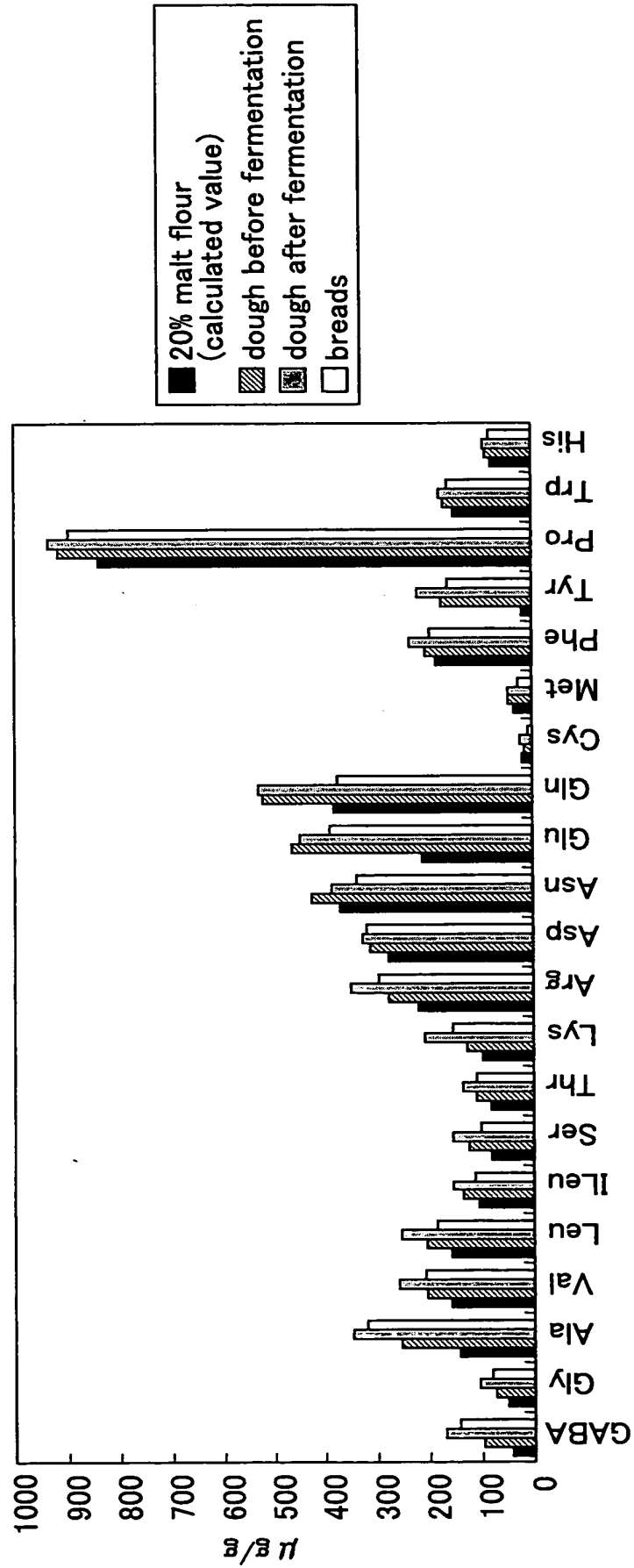
10% malt flour



free amino acids contents during the manufacturing process of  
breads with 10% of mixed ratio of malt flour

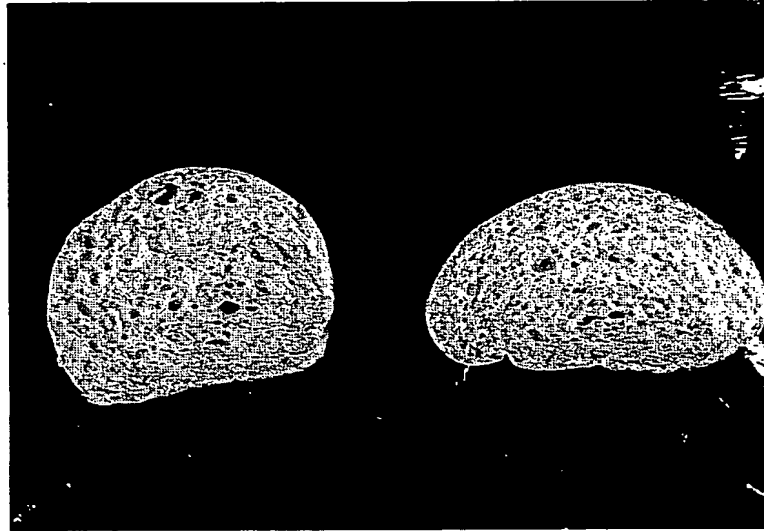
FIG.5

20% malt flour



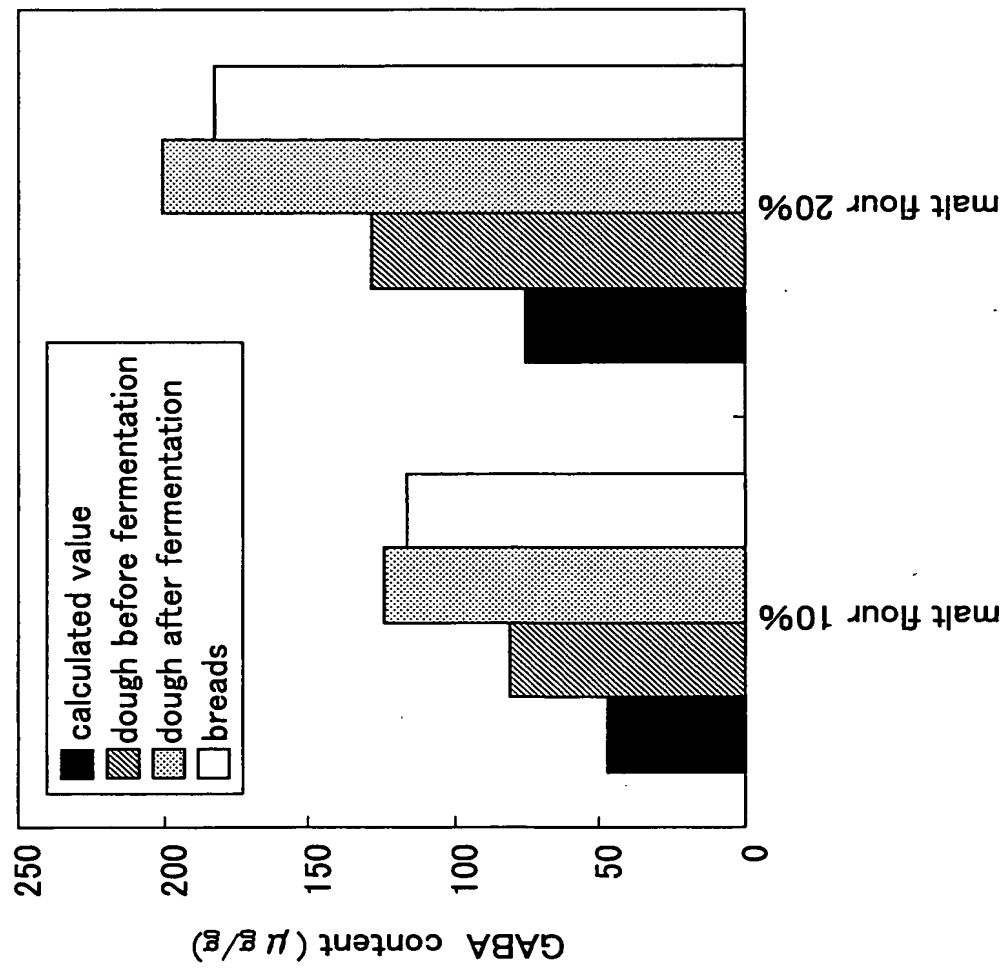
free amino acids contents during the manufacturing process of  
 breads with 20% of mixed ratio of malt flour

**FIG.6**



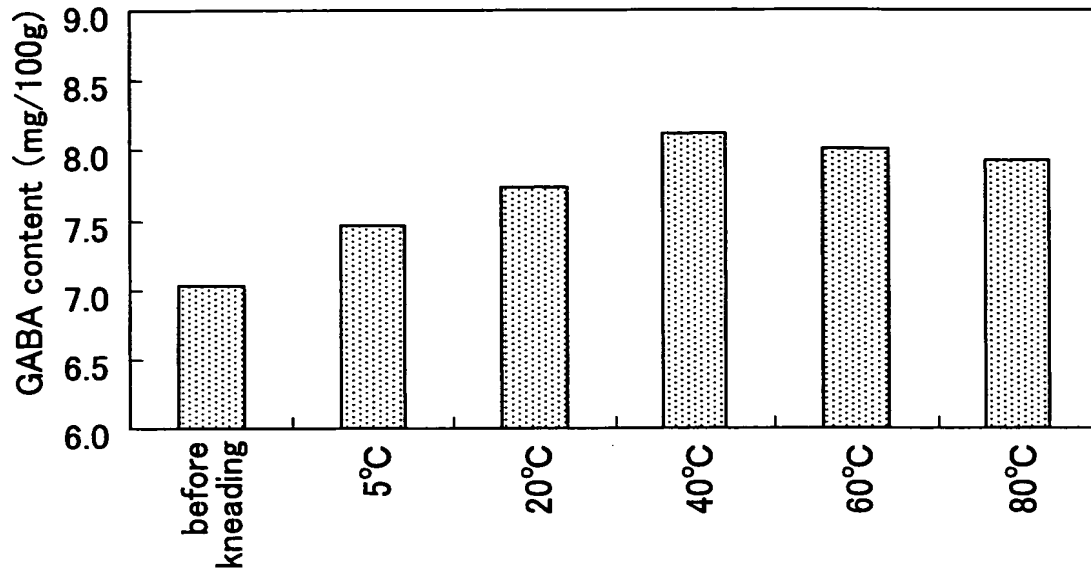
breads manufactured with malt which is treated only in the soaking process

FIG. 7



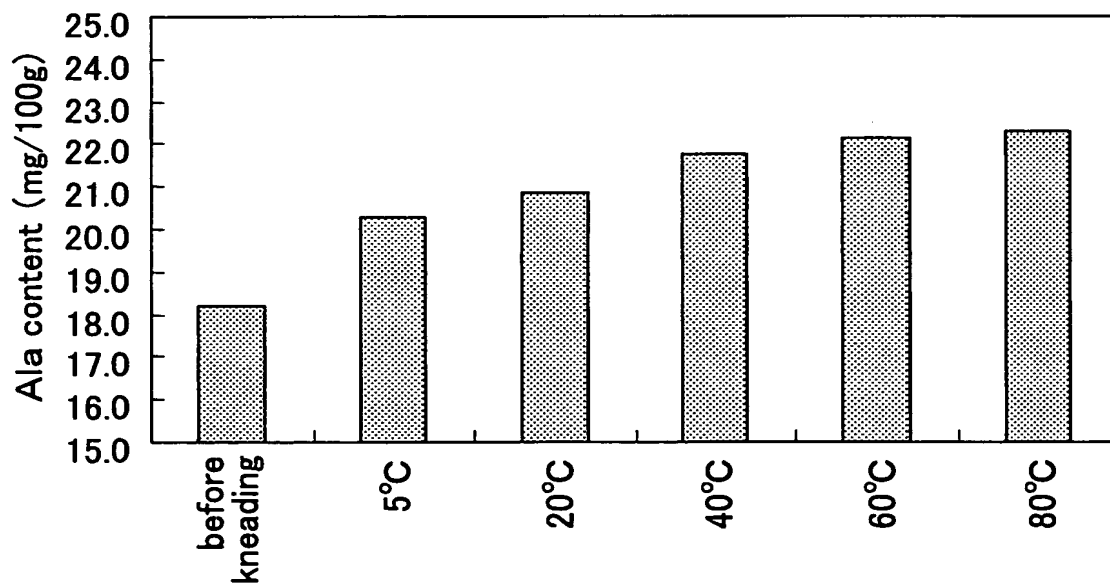
the GABA content during the manufacturing process of breads manufactured with malt only processed in the soaking process

FIG.8



GABA content before kneading and after kneading

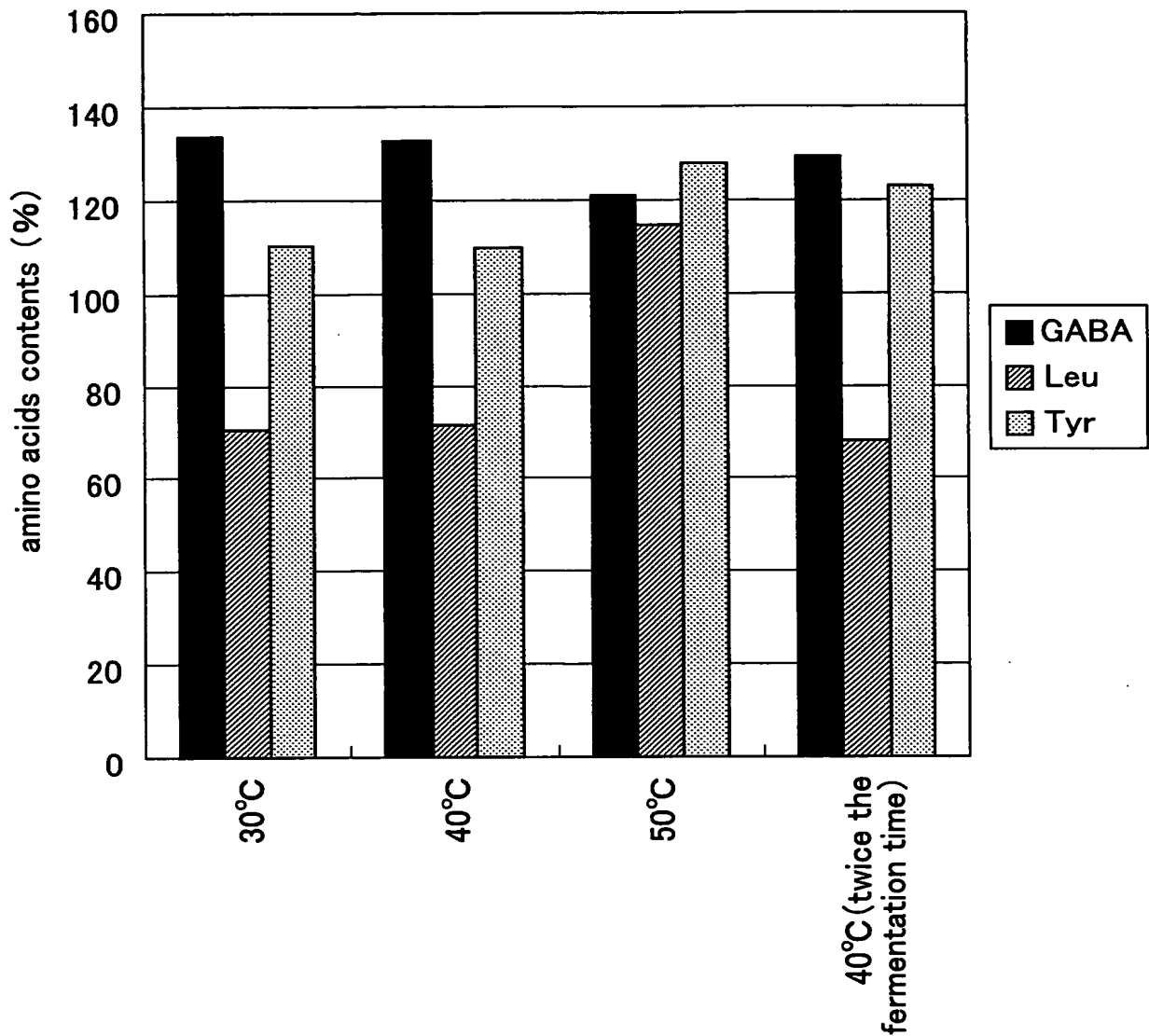
FIG.9



Ala content before kneading and after kneading



FIG.10



increasing rate of free amino acids contents in breads dough  
during the fermentation process for manufacturing breads

FIG.11

100% bread flour  
(free amino acids contents in dough before fermentation and after fermentation)

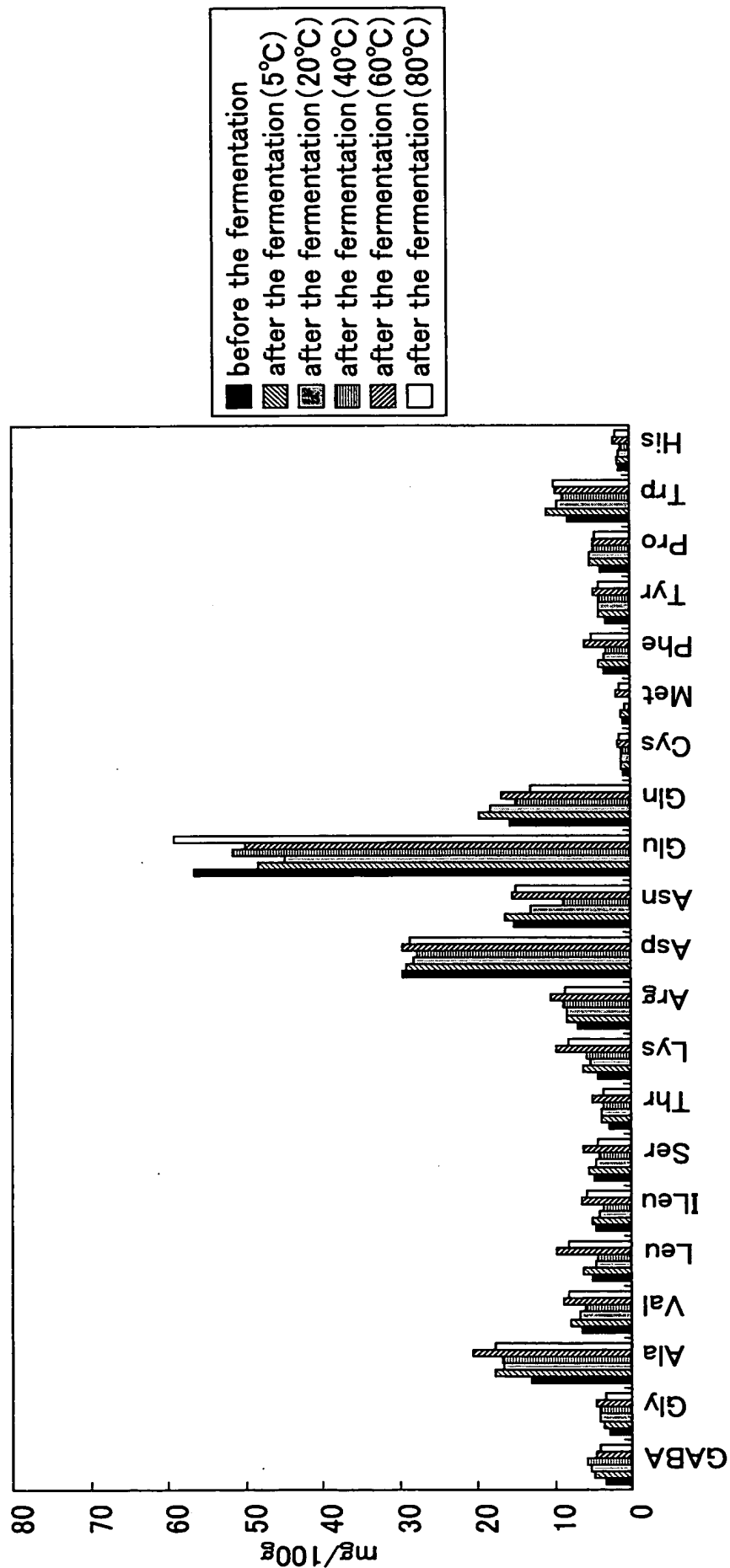


FIG.12

20% barley flour  
(free amino acids contents in dough before fermentation and after fermentation)

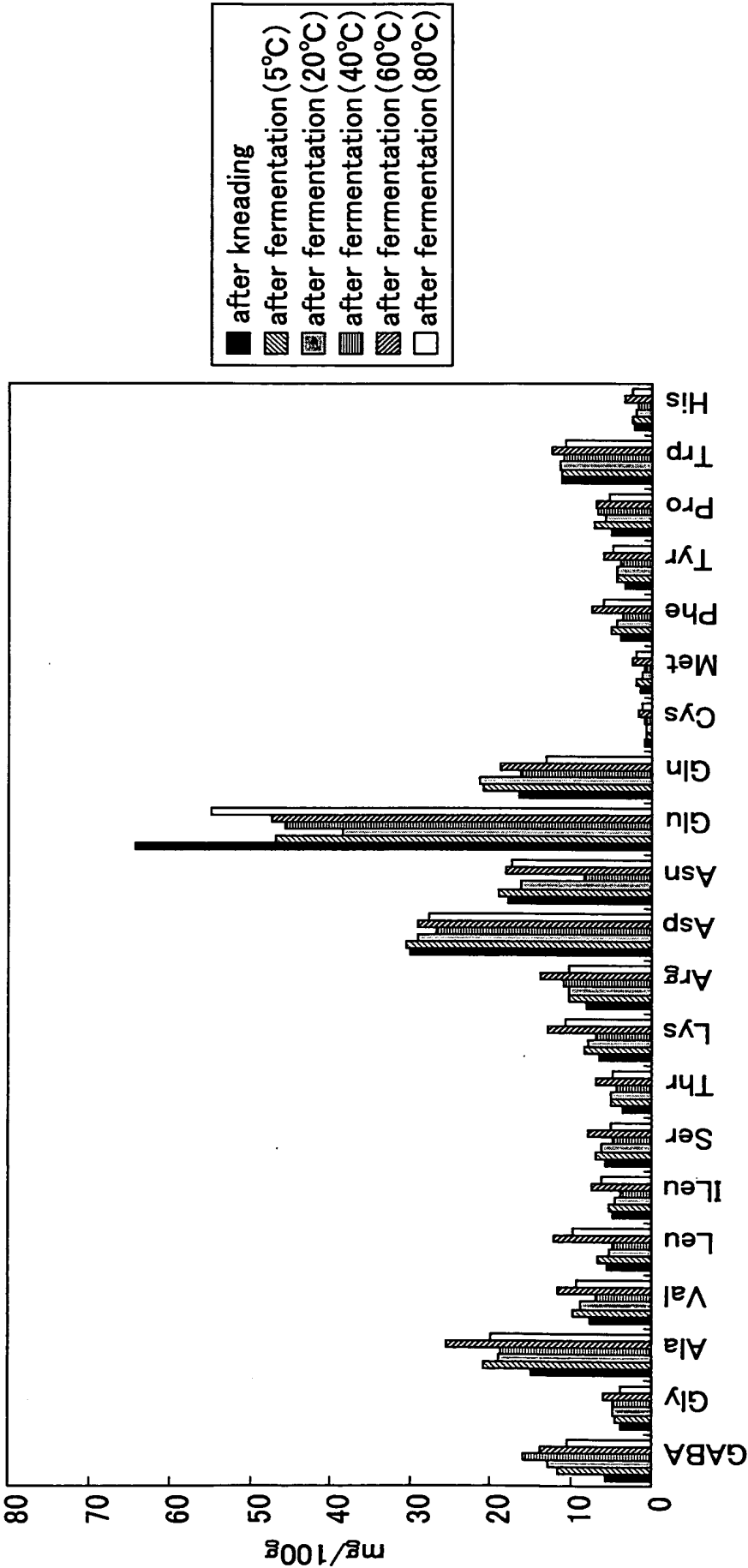


FIG.13

20% germinated barley flour  
(free amino acids contents in dough before fermentation and after fermentation)

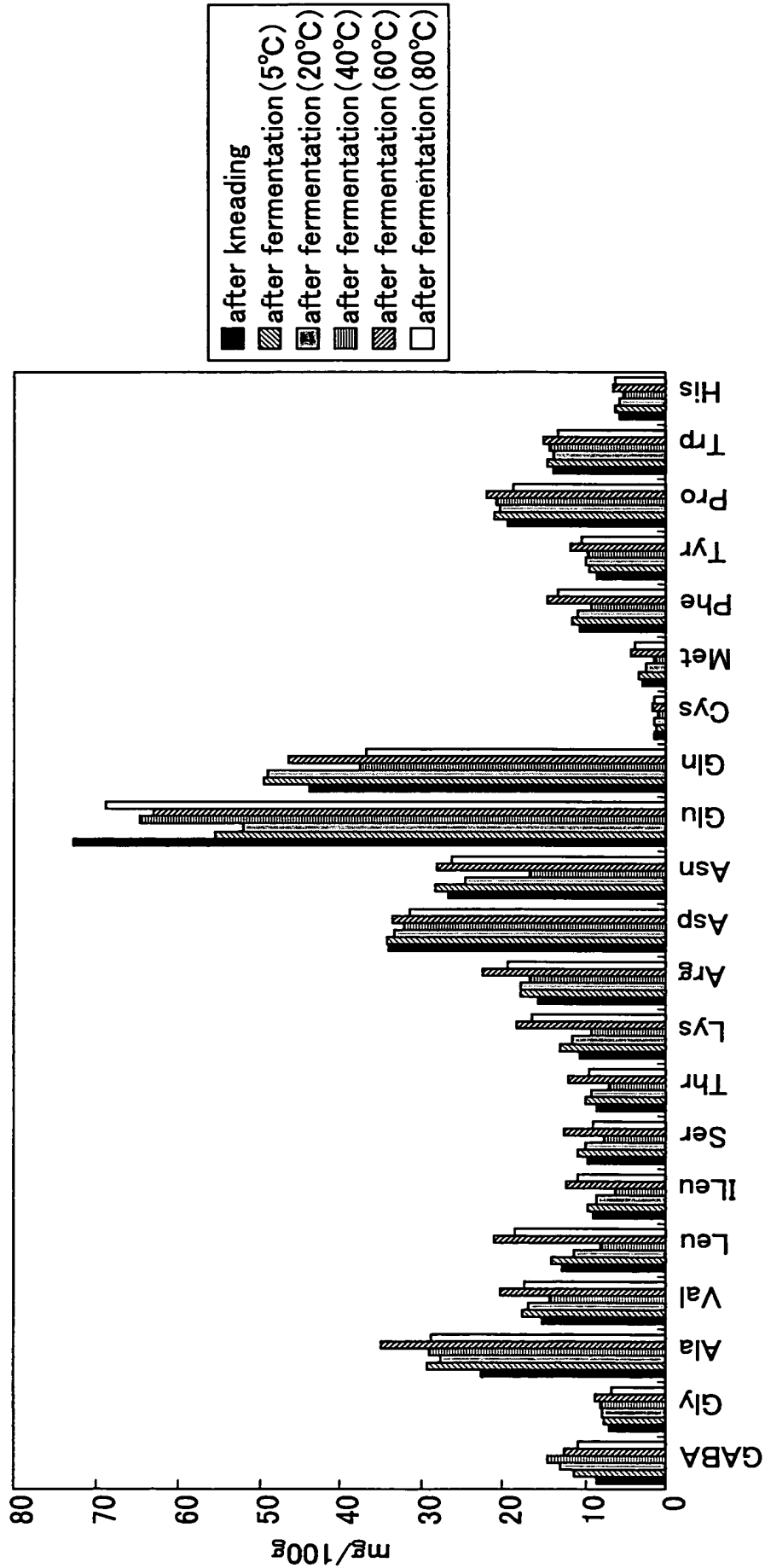


FIG.14

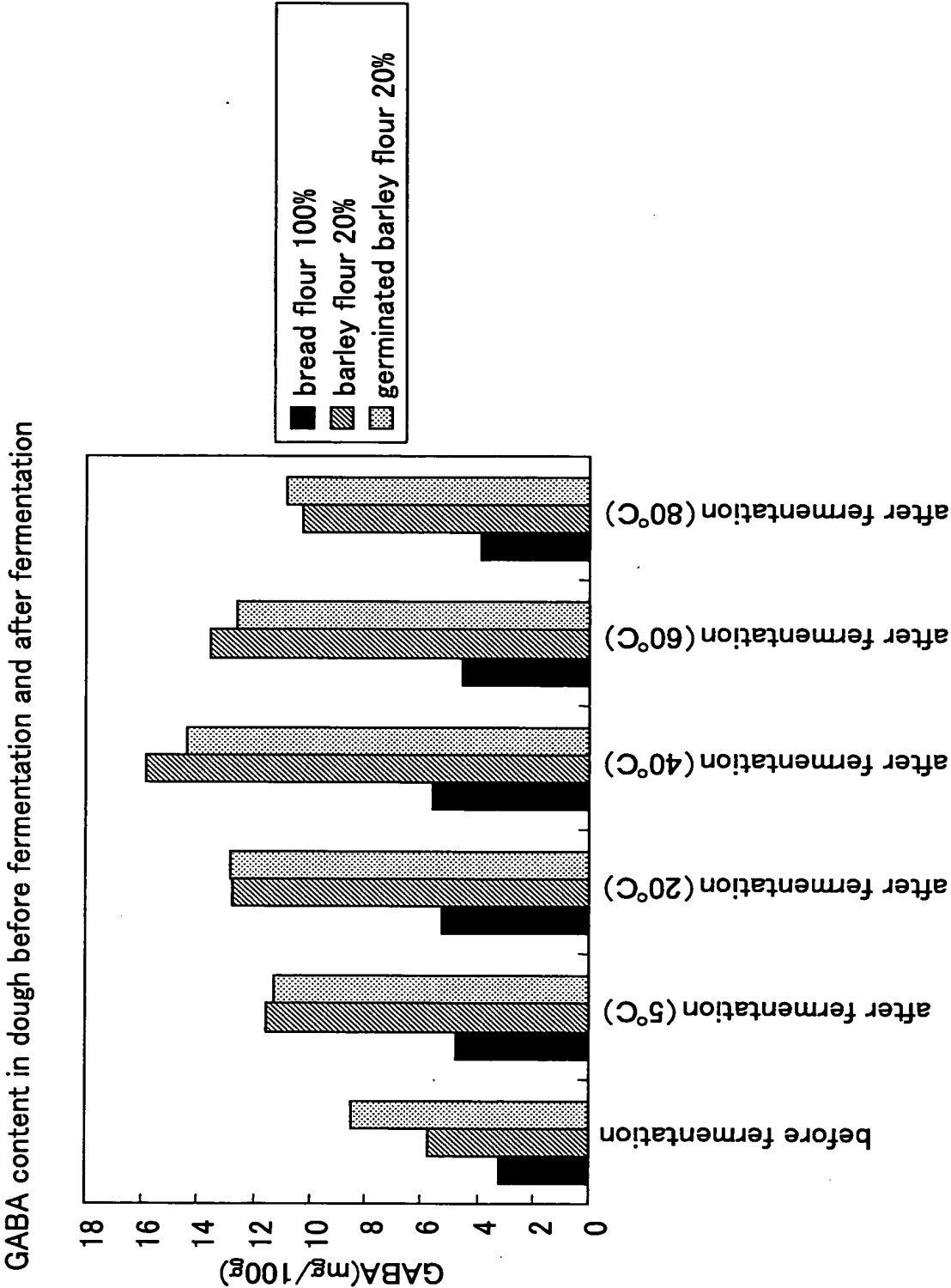
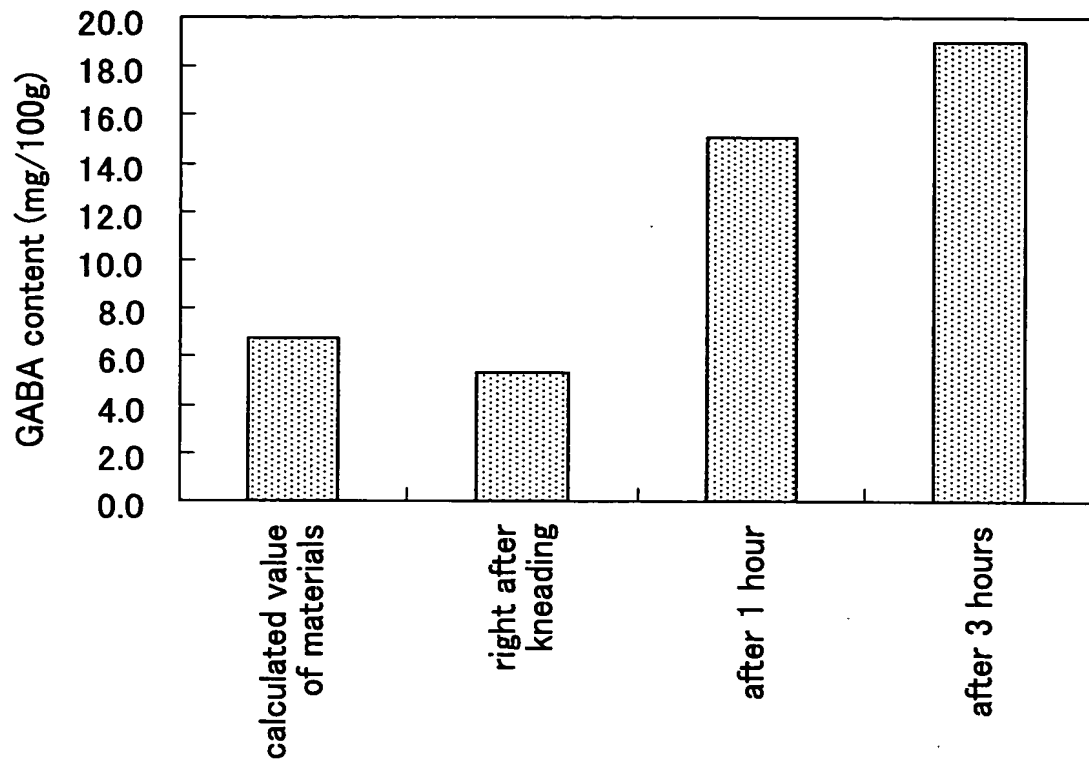
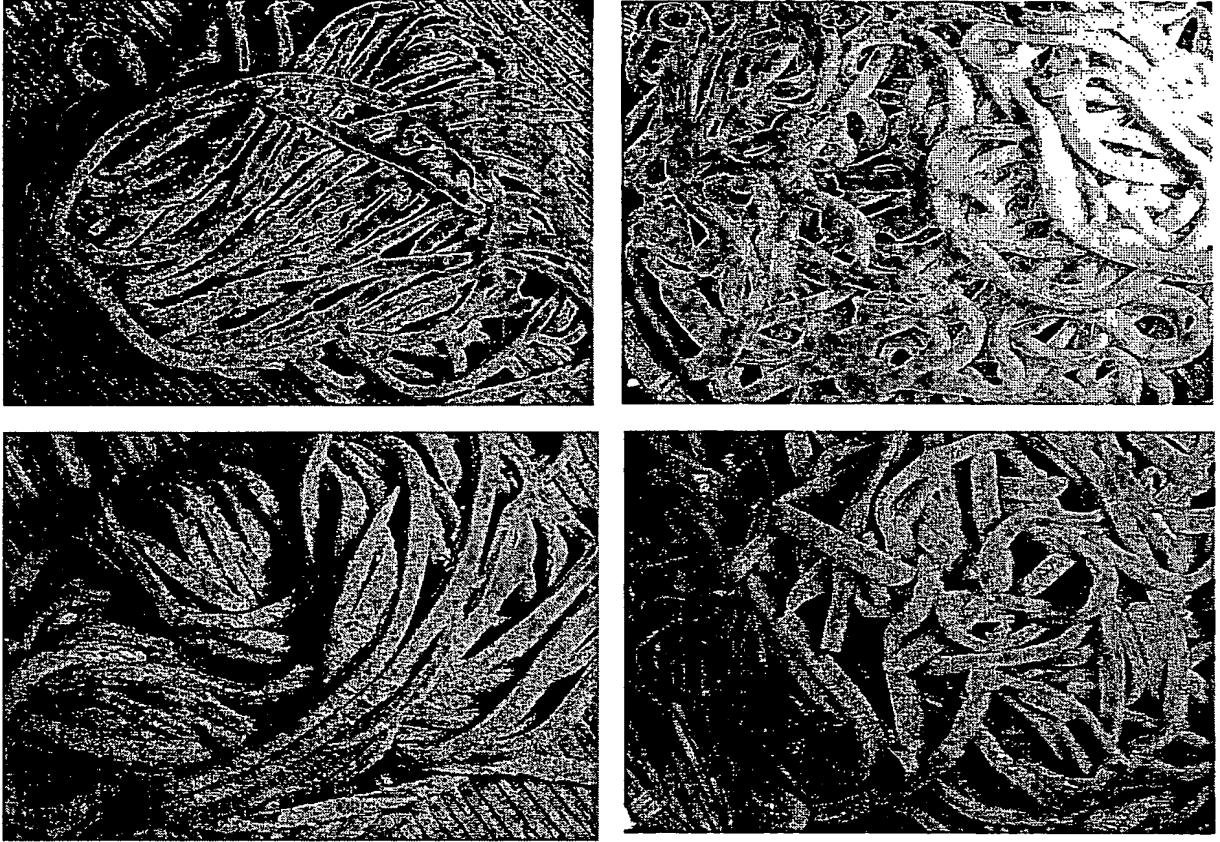


FIG.15



a change of the GABA content during manufacturing process of pasta

FIG.16



outer appearances of udon which has a mixed ratio of 0% malt and 20% malt

**FIG.17**



**outer appearance of soba-like noodles**



FIG.18

70% bread flour    30% pastry flour

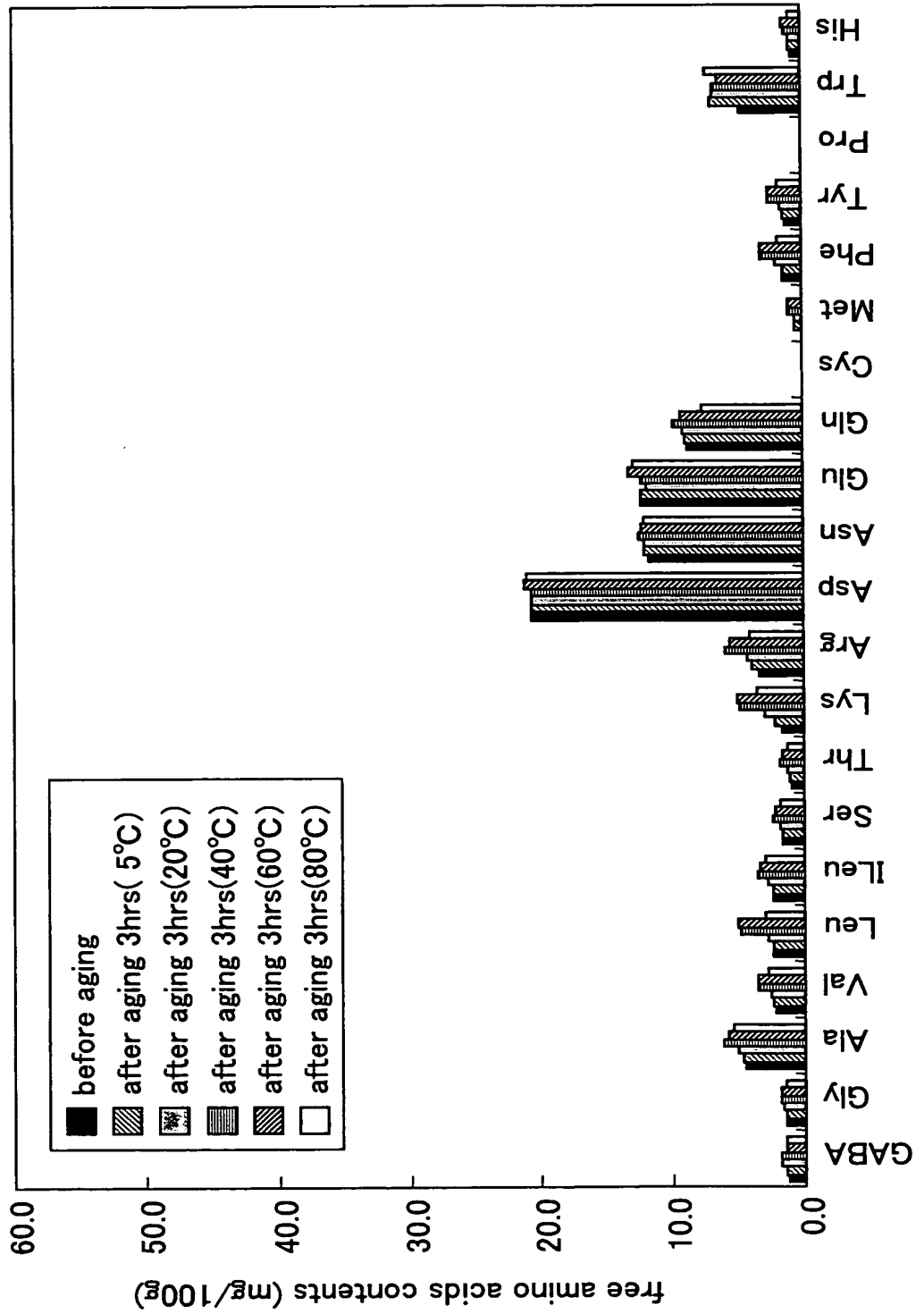


FIG.19

70% bread flour    30% barley flour

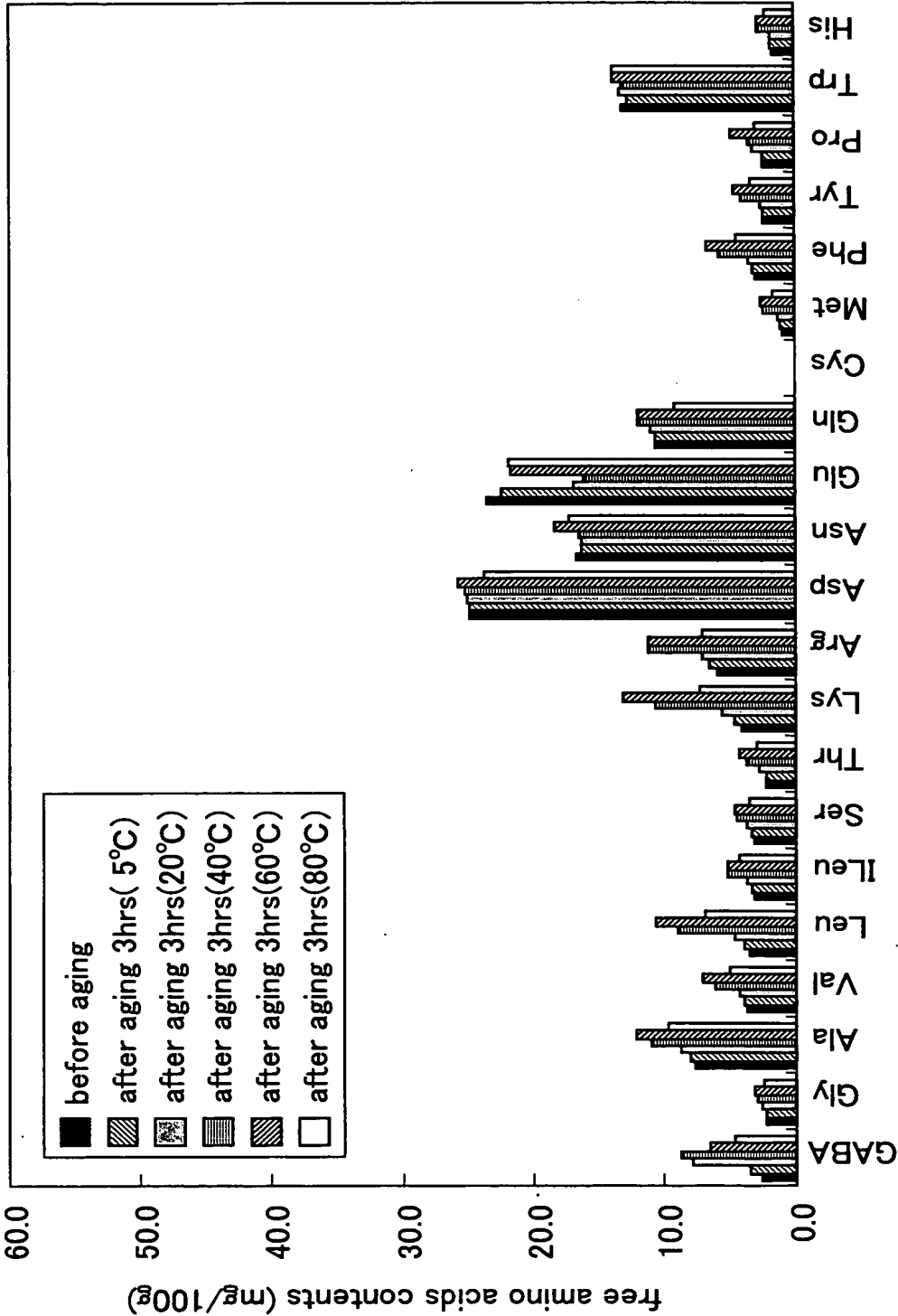


FIG.20

70% bread flour      30% germinated barley flour

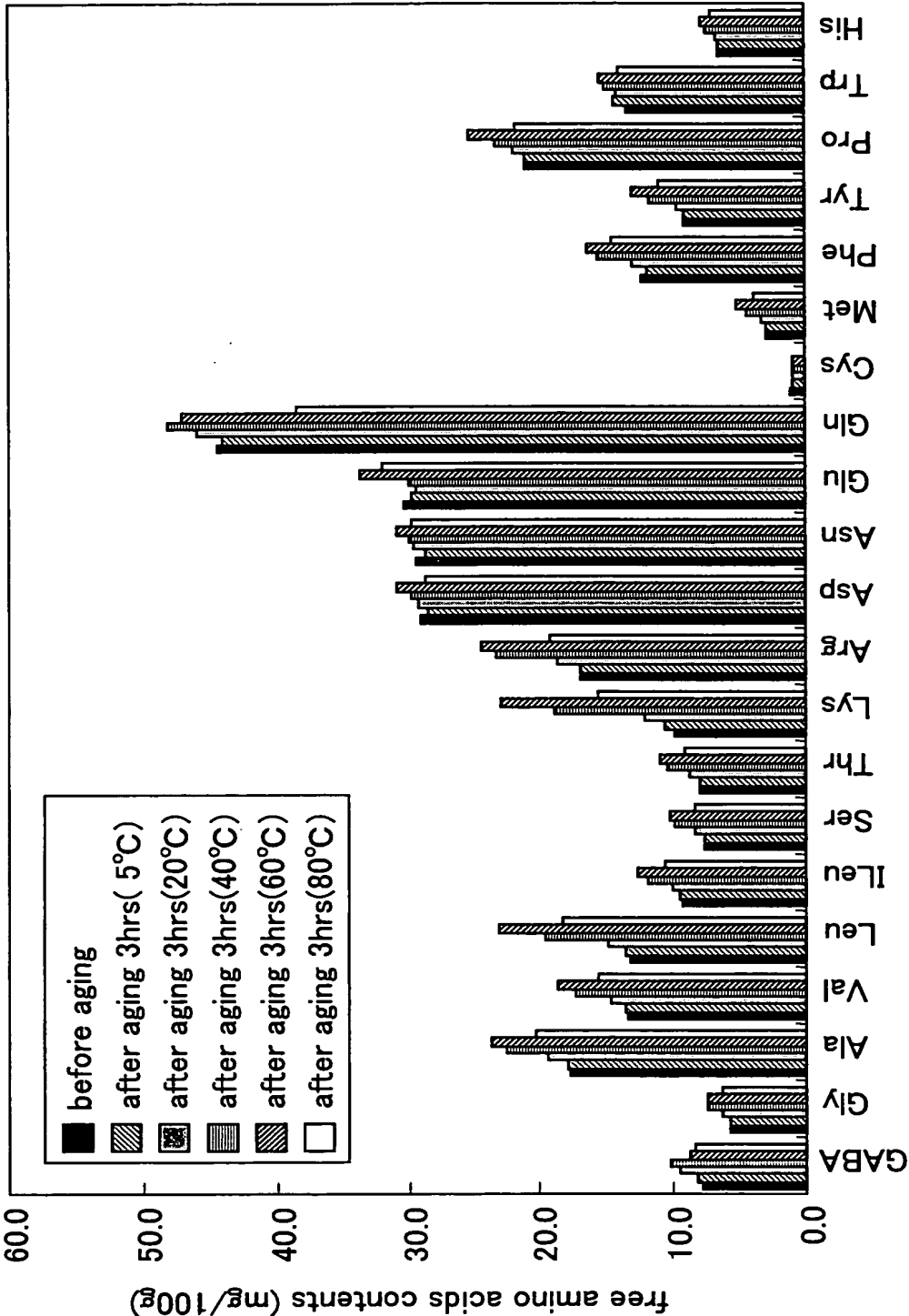


FIG.21

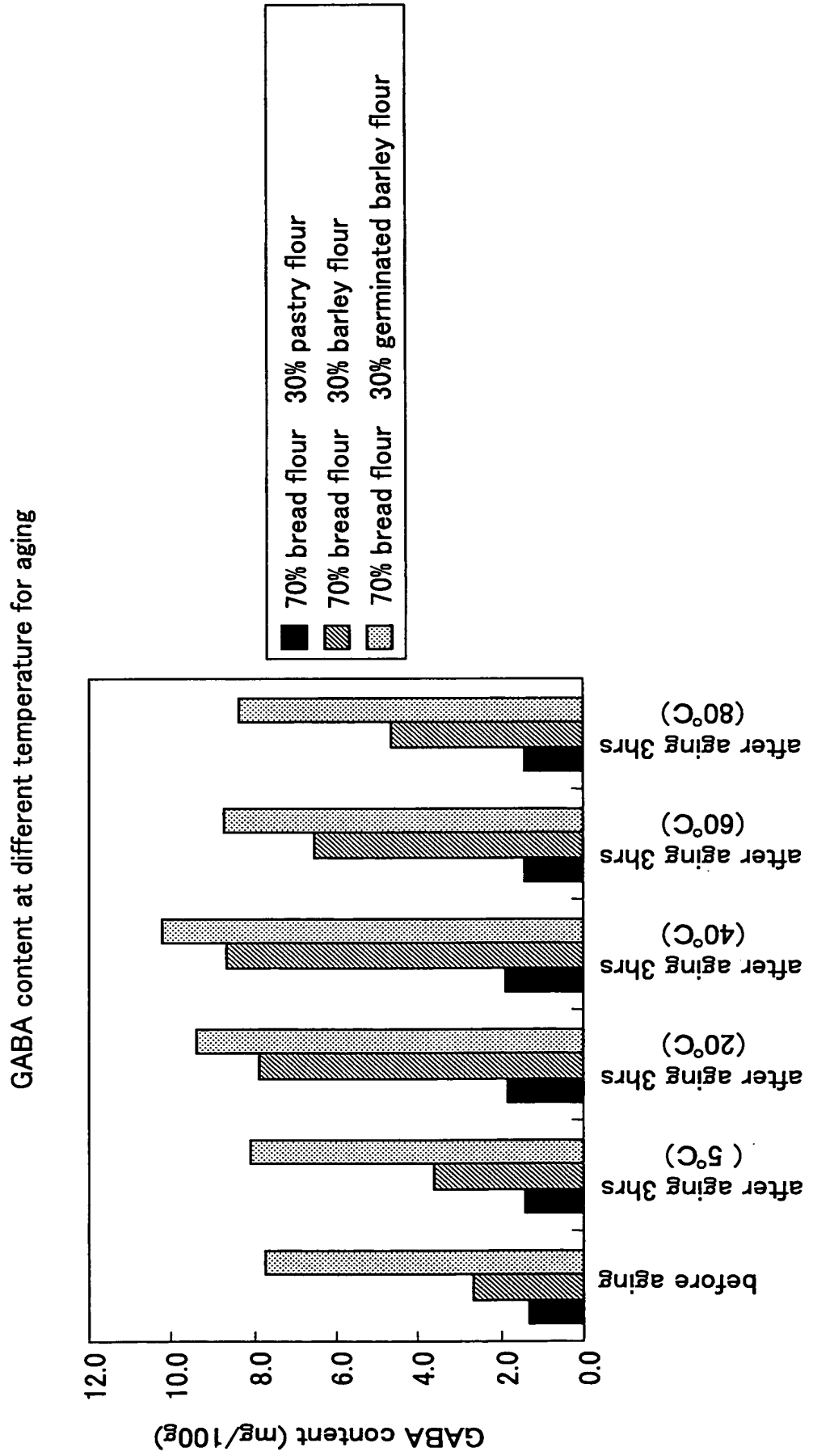
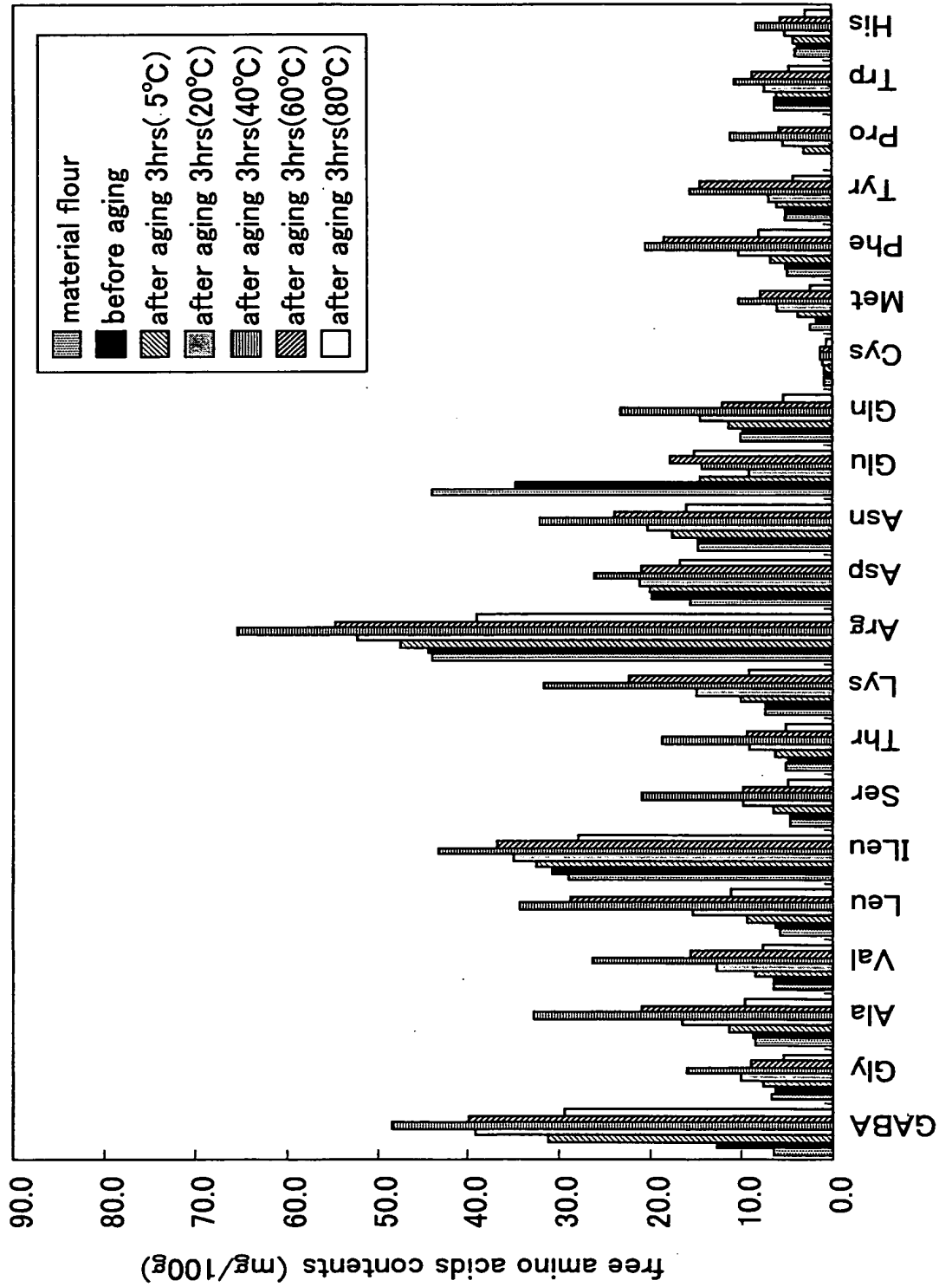


FIG.22

70% soba flour 30% bread flour



[illegible]

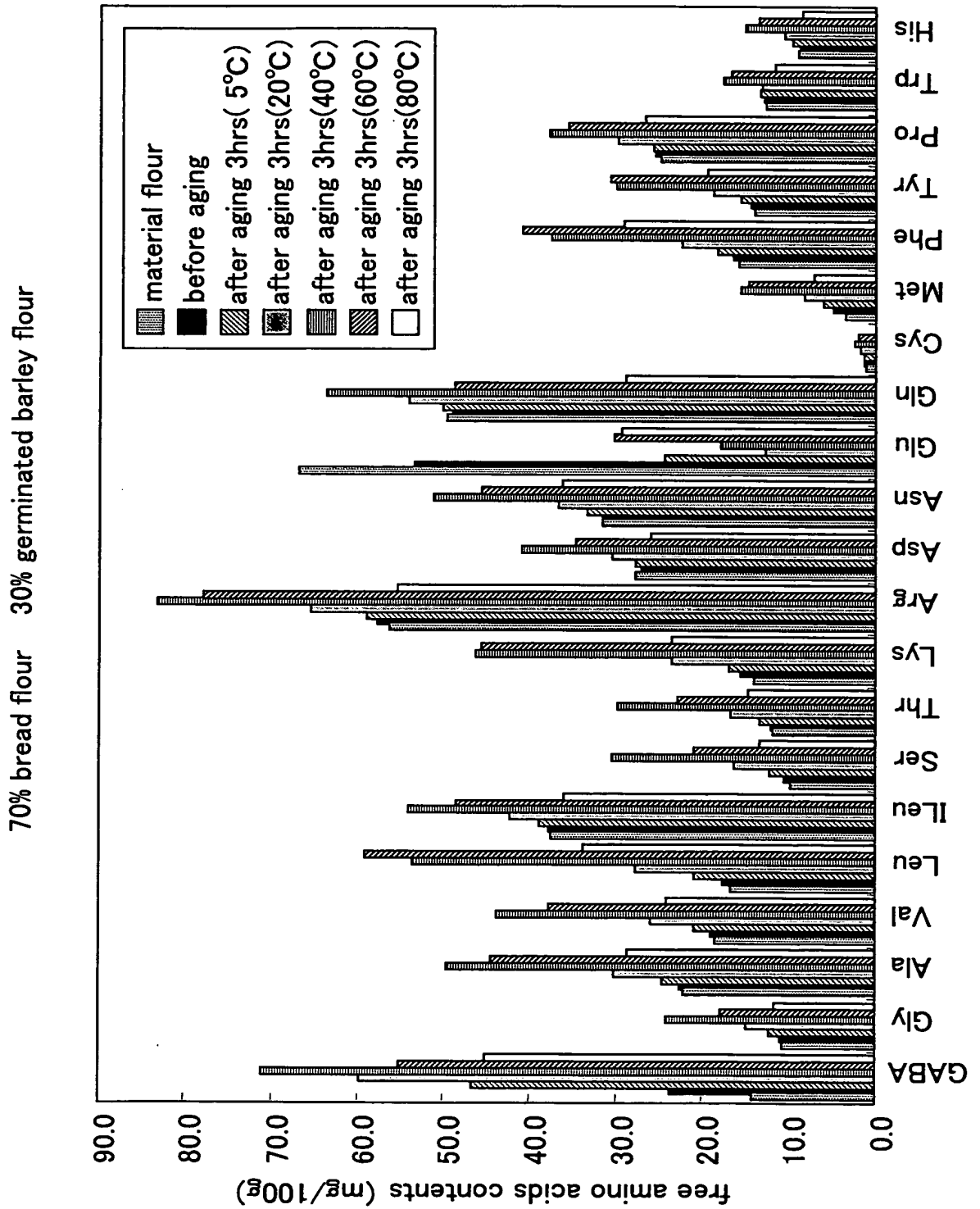






FIG.26

GABA content at different temperature for aging

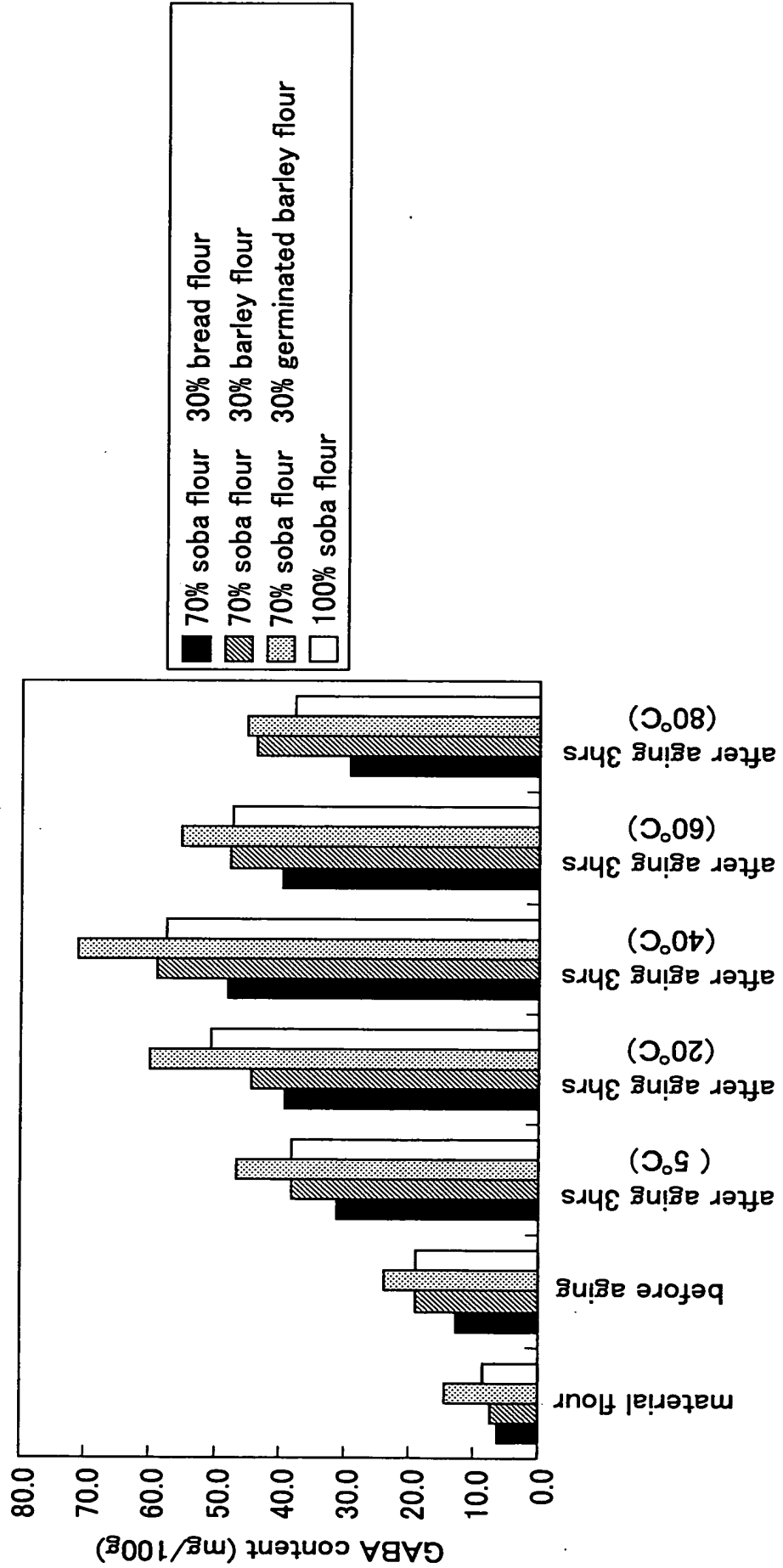


FIG.27

